

## New England Agricultural Statistics Service

a field office of the National Agricultural Statistics Service United States Department of Agriculture

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# Maine Potatoes Acreage, Yield, Size & Grade, 1999 Crop

January 12, 2000

A special "THANK YOU" goes to Maine growers who have helped us by participating in the Potato Objective Yield Survey program. The study estimates yield, size and grade from randomly selected hills that are dug just before harvest.



This report is funded through a cooperative agreement with the Maine Department of Agriculture as a service to growers and others in the industry. It is published annually and is available on the Internet in early January.

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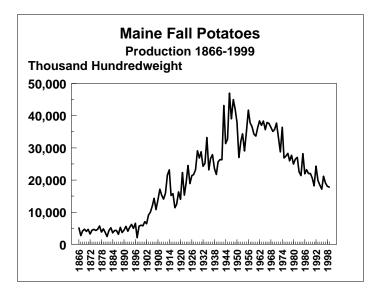
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### 1999 Maine Potatoes

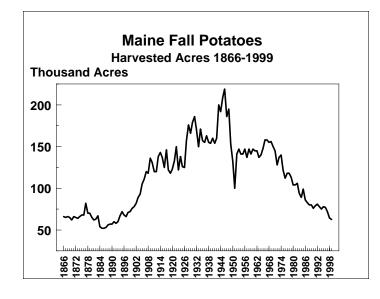
#### Acreage, Yield, Size and Grade, 1999 Crop

#### **FOREWORD:**

We are pleased to present the Maine Acreage, Yield, Size and Grade Report for the 1999 potato crop. Data contained in this report are based on the results of the Potato Objective Yield Survey, a project conducted annually since 1968. The National Potato Objective Yield program encompasses the 7 major fall potato producing states (Idaho, Maine, Minnesota, North Dakota, Oregon, Washington and Wisconsin) that grew 82 percent of the U.S. fall potato crop in 1999.

The 1999 Potato Objective Yield Survey in Maine consisted of 210 "samples" chosen by systematic random sampling. Each sample consisted of two independently located units. Within each unit, hill counts were made along a 20-foot length of the row, width of the row was measured, and 3 hills were harvested. Thus, tubers were harvested from 6 hills of potatoes for each sample. These potatoes were graded, sized and weighed using strict laboratory procedures. After harvest, enumerators returned to one-fourth of the sample fields to obtain an objective indication of harvest loss. Tubers were collected from two units, each unit covering a 3 foot by 6 foot area, and sent to the lab for weighing.

The success of this project must be credited to the cooperation of many potato growers across the State of Maine. We sincerely appreciate their time and efforts in supplying crop information, and granting permission for field entry and sample diggings. The 1999 Maine Potato Objective Yield survey was under the immediate supervision of Dianne Johnson and Dave Mikelson. Robin Helrich was responsible for setting the estimates of acreage, yield, production, prices, and stocks. We would also like to recognize Adrienne Zappia for her assistance in preparing this publication.



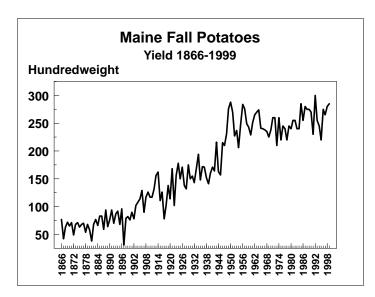


Table 1: MAINE POTATOES: Acres, Yield and Production, 1995 - 1999

VEAD	Ac	res	Yield	
YEAR	Planted	Harvested	per Acre	Production
	Ac	res	Cwt	1,000 Cwt
1995	78,000	78,000	220	17,160
1996	78,000	77,000	275	21,175
1997	72,000	72,000	265	19,080
1998	65,500	64,500	280	18,060
1999 <sup>1/</sup>	65,000	62,500	285	17,813

SOURCE: Crop Production - Annual, 8:30 am , January 12, 2000, National Agricultural Statistics Service, USDA. All previous years are final.

Table 2: MAINE POTATOES: Percent of Acres Planted by Variety, 1995 - 1999

VARIETY & TYPE	1995	1996	1997	1998	1999
BY VARIETY:			Percent	L	
Atlantic	8	5	6	6	5
Frito-Lay, All	8	10	9	10	10
Goldrush	4	3	2	2	1/
Katahdin	3	4	3	3	3
Mainestay	2	1/	2	1/	1/
Norwis	3	3	4	3	2
Ontario	10	9	8	12	17
Russet Burbank	16	20	20	23	26
Russet Norkotah	7	8	4	3	1
Snowden	5	5	4	5	3
Shepody	11	11	12	14	15
Superior	14	14	14	9	8
Yukon Gold				_	2
All Red Varieties	1/	1/	4	4	4
Other Varieties	9	8	8	6	4
TOTAL VARIETIES	100	100	100	100	100
BY TYPE:					
White & Red Varieties	69	68	73	72	72
Russet Varieties	31	32	27	28	28

<sup>1/</sup> Included with other varieties

Table 3A: MAINE POTATOES: Number of Tubers 11 per Hill and Hills per Acre, by Type, 1995 - 1999

	Round	Whites	Long \	Whites	Rus	sets	All Varieties 2/		
YEAR	Tubers 1/ per Hill	Hills per Acre	Tubers 1/ per Hill	Hills per Acre	Tubers 1/ per Hill	Hills per Acre	Tubers <sup>1/</sup> per Hill	Hills per Acre	
1995	5.3	14,590	4.1	13,677	6.7	10,262	5.6	13,248	
1996	7.3	13,695	5.9	12,828	9.9	9,739	8.0	12,461	
1997	6.3	14,122	6.0	12,521	10.6	9,289	7.7	12,449	
1998	7.6	13,317	6.5	12,218	9.8	10,189	8.1	12,323	
1999	6.8	13,425	5.8	12,767	9.4	9,112	7.4	12,168	

<sup>1/</sup> Tubers 11/2 inches and over 2/ Includes Red varieties

*Table 3B:* MAINE POTATOES: Number of Tubers <sup>1/</sup> per Hill and Hills per Acre, by Selected Varieties, 1995 - 1999

	Supe	rior <sup>2/</sup>	Shep	ody	Russet Burbank <sup>2/</sup>			
YEAR	Tubers 1/ per Hill	Hills per Acre	Tubers <sup>1/</sup> per Hill	Hills per Acre	Tubers 1/ per Hill	Hills per Acre		
						_		
1995			4.1	13,677				
1996	7.4	14,950	5.9	12,828	11.0	8,817		
1997	6.2	14,335	6.0	12,521	11.3	8,846		
1998	7.2	14,219	6.5	12,218	10.5	9,539		
1999	6.2	13,400	5.8	12,767	9.5	9,081		

 $<sup>^{1/}</sup>$  Tubers 1½ inches and over  $^{2/}$  Superior and Russet Burbank unavailable prior to 1996

Table 4A: MAINE POTATOES: Percent of Net Yield 1/ by Weight within Size Groups, Round Whites, 1995 - 1999

CIZE		Round Whi	tes (includii	ng Superior	)	Superior only				
SIZE	1995	1996	1997	1998	1999	1997	1998	1999		
				Per	cent					
1 <sup>1</sup> / <sub>2</sub> " - under 1 <sup>7</sup> / <sub>8</sub> "	4	4	2	3	2	1	1	2/		
1 <sup>7</sup> /8" - under 2"	3	4	3	4	3	3	3	2		
2" - under 21/4"	12	13	10	11	10	14	8	10		
2 <sup>1</sup> / <sub>4</sub> " - under 2 <sup>1</sup> / <sub>2</sub> "	18	18	16	17	16	24	17	14		
2 <sup>1</sup> / <sub>2</sub> " - under 3 <sup>1</sup> / <sub>2</sub> "	57	58	63	56	62	56	63	66		
31/2" - under 4"	5	3	5	7	6	2	7	8		
4" and over	1	2/	2/	2	1	2/	1	2/		

<sup>&</sup>lt;sup>1/</sup> Adjusted for harvest loss <sup>2/</sup> Less than 1 percent

*Table 4B:* MAINE POTATOES: Percent of Net Yield <sup>1/</sup> by Weight within Size Groups, Long Whites & Russets, 1995 - 1999

SIZE		l	ong White	s		Russets						
SIZE	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999		
					Per	cent						
1 <sup>1</sup> / <sub>2</sub> " - under 1 <sup>7</sup> / <sub>8</sub> "	3	2	1	2	3	4	4	5	6	3		
1 <sup>7</sup> / <sub>8</sub> " - under 2"	3	3	1	5	3	5	5	6	5	4		
2" and over:												
4 oz - under 6 oz 2/	28	26	30	23	24	35	32	42	31	24		
6 oz - under 8 oz	23	19	21	20	20	19	22	22	19	19		
8 oz - under 10 oz	17	13	18	18	15	16	15	13	14	16		
10 oz and over	26	37	29	32	35	21	22	12	25	34		

*Table 4C:* MAINE POTATOES: Percent of Net Yield <sup>1/</sup> by Weight within Size Groups, Selected Varieties, 1998 & 1999

0175		She	pody	-	Russet Burbank						
SIZE	1996	1997	1998	1999	1996	1997	1998	1999			
				Per	cent						
1 <sup>1</sup> / <sub>2</sub> " - under 1 <sup>7</sup> / <sub>8</sub> "	2	1	2	3	4	5	5	3			
1 <sup>7</sup> / <sub>8</sub> " - under 2"	3	1	5	3	4	6	5	4			
2" and over:											
4 oz - under 6 oz 2/	26	30	23	24	30	43	29	24			
6 oz - under 8 oz	19	21	20	20	23	21	19	19			
8 oz - under 10 oz	13	18	18	15	15	13	13	16			
10 oz and over	37	29	32	35	24	12	29	34			

Table 5: MAINE POTATOES: Percent of Net Yield by Weight within Grade 11, by Type, 1995 - 1999

	able of the title of the order of the tribia by trought within order , by .										, .,pe,				
00405		Ro	und Whi	ites			L	ong Whit	es		Russets				
GRADE	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
								Percent							
U.S. No. 1	86	78	82	79	79	82	68	87	73	64	79	72	70	72	67
U.S. No. 2	10	14	10	13	11	11	16	8	18	18	16	14	19	17	16
Culls	4	8	8	8	10	7	16	5	9	18	5	14	11	11	17

<sup>&</sup>lt;sup>1/</sup> Reflects condition before harvest or handling damage

 $<sup>^{1/}</sup>$  Adjusted for harvest loss  $^{2/}$  Includes potatoes 2 inches or greater weighing less than 4 ounces.

 $<sup>^{1/}</sup>$  Adjusted for harvest loss  $^{2/}$  Includes potatoes 2 inches or greater weighing less than 4 ounces.

Table 6A: MAINE POTATOES: Harvest Loss by Size and Grade, Round Whites, 1995 - 1999

0.75		<u> </u>	J.S. No.	1			U.S. No. 2 & Cull				Total 1/				
SIZE	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
						i	Cı	vt Per A	cre						
1 <sup>1</sup> / <sub>2</sub> " - under 1 <sup>7</sup> / <sub>8</sub> "	0	0	0	0	0	5	5	4	5	3	5	5	4	5	3
1 <sup>7</sup> /8" - under 2"	0	0	0	0	0	2	2	1	2	1	2	2	1	2	1
2" - under 2 <sup>1</sup> / <sub>4</sub> "	1	1	1	2/	1	2	2	1	1	2	3	3	2	1	3
2 <sup>1</sup> / <sub>4</sub> " - under 2 <sup>1</sup> / <sub>2</sub> "	1	1	1	0	1	2	1	0	1	1	3	2	1	1	2
2 <sup>1</sup> / <sub>2</sub> " - under 3 <sup>1</sup> / <sub>2</sub> "	2/	2/	0	1	1	3	1	1	2	3	3	2	1	3	4
3 <sup>1</sup> / <sub>2</sub> " - under 4"	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
4" and over	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total 1/	2	2	2	1	3	13	11	7	11	11	15	14	9	12	14

<sup>1/</sup> Totals may not agree due to rounding 2/ Less than 0.5 cwt per acre

Table 6B: MAINE POTATOES: Harvest Loss by Size and Grade, Long Whites, 1995 - 1999

		U.S. No. 1						U.S. No. 2 & Cull				Total 1/			
SIZE	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
						1	Cv	vt Per A	cre		1				
1 <sup>1</sup> / <sub>2</sub> " - under 1 <sup>7</sup> / <sub>8</sub> "	0	0	0	0	0	4	12	6	5	4	4	12	6	5	4
1 <sup>7</sup> / <sub>8</sub> " - under 2"	0	0	0	0	0	1	2	6	1	2	1	2	6	1	2
2" and over:															
4 oz - under 6 oz 3/	2/	0	7	1	3	4	1	0	4	3	4	1	7	5	6
6 oz - under 8 oz	0	3	8	1	1	0	1	0	0	0	0	4	8	1	1
8 oz - under 10 oz	0	0	0	0	0	0	2	3	0	1	0	2	3	0	1
10 oz and over	0	1	0	0	0	2	0	0	0	2	2	0	0	0	2
Total 1/	2/	3	15	2	4	11	18	10	10	12	11	21	30	12	16

 $<sup>^{1/}</sup>$  Totals may not agree due to rounding  $^{-2/}$  Less than 0.5 cwt per acre  $^{3/}$  Includes potatoes 2 inches or greater weighing less than 4 ounces

Table 6C: MAINE POTATOES: Harvest Loss by Size and Grade, Russets, 1995 - 1999

0.75		U.S. No. 1					U.S. No. 2 & Cull				Total <sup>1/</sup>				
SIZE	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
						i	C	wt Per A	cre		i				
1 <sup>1</sup> / <sub>2</sub> " - under 1 <sup>7</sup> / <sub>8</sub> "	0	0	0	0	0	7	10	5	5	4	7	10	5	5	4
1 <sup>7</sup> / <sub>8</sub> " - under 2"	0	0	0	0	0	4	4	2	3	2	4	4	2	3	2
2" and over:															
4 oz - under 6 oz 3/	4	1	4	2	2	3	3	3	3	2	7	4	7	5	4
6 oz - under 8 oz	2	0	1	0	2/	2	0	2/	2	1	4	0	1	2	1
8 oz - under 10 oz	0	0	1	0	1	0	0	0	0	2/	0	0	1	0	1
10 oz and over	0	1	0	1	0	0	0	1	0	4	0	1	1	1	4
Total 1/	6	2	6	3	3	16	17	11	13	13	22	19	17	16	16

 $<sup>^{1/}</sup>$  Totals may not agree due to rounding  $^{-2/}$  Less than 0.5 cwt per acre  $^{3/}$  Includes potatoes 2 inches or greater weighing less than 4 ounces

Table 7: MAINE POTATOES: Planting Progress, 1995 - 1999

Week Ending	Percent of Acres Planted Weekly					Accumulated Percent of Acres				
	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
				•	Percent					
before May 2	5	_	2	3	11	5	_	2	3	11
May 9	15	10	2	13	32	20	10	4	16	43
May 16	27	21	3	41	35	47	31	7	57	78
May 23	26	31	5	28	17	73	62	12	85	95
May 30	18	23	47	12	3	91	85	59	97	98
June 6	9	11	32	2	1	100	95	91	99	99
June 13	0	4	6	1	1	100	100	97	100	100
after June 13	0	0	3	0	0	100	100	100	100	100

*Table 8:* <sup>1/</sup> MAINE POTATOES: Potato Production and Stocks Held by Growers, Local Dealers and Processors, by Month, 1994 - 1998 Crop Years

CROP YEAR		Stocks Held by Growers, Local Dealers, and Processors									
	Production	Year	Following Year								
		December 1	January 1	February 1	March 1	April 1	May 1	June 1 2/			
					1,000 Cwt			•			
1994	18,375	13,400	11,400	9,400	7,700	5,200	2,800				
1995	17,160	13,800	12,400	10,400	8,500	5,700	2,800				
1996	21,175	16,900	15,300	13,100	11,200	8,400	5,300				
1997	19,170	15,600	14,100	12,100	10,300	7,400	4,500				
1998	18,060	14,100	12,500	10,500	8,450	6,000	3,800	1,900			

<sup>&</sup>lt;sup>1/1</sup> Data in this table is not derived from the Potato Objective Yield Survey; this is the result of the monthly Potato Stocks/Price survey also conducted by the New England Agricultural Statistics Service.

SOURCE: **Potato Stocks**, 3:00 pm, mid-month December - June, National Agricultural Statistics Service, USDA. **Potatoes**, 3:00 pm, September 22, 2000, National Agricultural Statistics Service, USDA.

Table 9: 10 MAINE POTATOES: Prices Received, 1994 - 1998 Crop Years

Table 9. WAINE FOR TOLO. Frices Necerved, 1994 - 1990 Crop Tears												
		Prices Received <sup>2/</sup> by Farmers for All Potatoes, Monthly and Marketing Year Average										
CROP YEAR	August	September	October	November	December	January	February	March	April	May	Market Year Average	
	Dollars Per Cwt											
1994	5.65	4.85	5.25	5.70	6.00	6.20	6.25	6.60	6.70	6.15	6.10	
1995	5.55	5.25	5.85	6.25	6.25	6.30	6.30	6.60	6.85	7.05	6.40	
1996	5.20	4.70	4.90	4.35	4.35	4.65	4.50	4.75	5.05	4.55	4.60	
1997	8.10	5.65	5.70	6.10	6.30	6.10	6.35	6.55	6.95	6.75	6.40	
1998	6.25	5.40	5.70	5.85	5.90	6.15	6.45	6.90	7.45	7.05	6.45	

<sup>&</sup>lt;sup>1/</sup> Data in this table is not derived from the Potato Objective Yield Survey; this is the result of the monthly Potato Stocks/Price survey also conducted by the New England Agricultural Statistics Service.

SOURCE: Agricultural Prices, 3:00 pm, late-month September - June, National Agricultural Statistics Service, USDA.

<sup>&</sup>lt;sup>2</sup>/ June 1 stocks on hand unavailable prior to June 1, 1999.

<sup>&</sup>lt;sup>2/</sup> Average price of potatoes sold for all uses, including table stock, processing, seed and livestock feed.

Table 10: 1/2 FALL POTATOES: Acreage, Yield and Production, 1998 - 1999

STATE	Area Planted		Area H	arvested	Yield po	er Acre	Production	
	1998	1999	1998	1999	1998	1999	1998	1999
		1,000	) Acres		Cv	vt	1,000	) Cwt
California	10.3	9.0	10.3	9.0	360	445	3,708	4,005
Colorado	75.8	77.2	75.7	76.9	335	335	25,360	25,762
Idaho	410.0	395.0	408.0	393.0	338	339	138,000	133,330
Maine	65.5	65.0	64.5	62.5	280	285	18,060	17,813
Massachusetts	2.9	3.0	2.9	2.9	235	255	682	740
Michigan	47.0	48.0	46.5	47.5	315	315	14,648	14,963
Minnesota	82.0	70.0	73.0	53.0	290	340	21,170	18,020
Montana	10.6	11.0	10.6	10.9	300	305	3,180	3,325
Nebraska	22.0	21.6	21.8	21.2	375	420	8,175	8,904
New York	27.6	26.0	27.0	25.5	270	265	7,290	6,758
North Dakota	126.0	121.0	122.0	110.0	235	240	28,670	26,400
Ohio	5.1	4.8	4.8	4.7	250	210	1,200	987
Oregon	59.0	56.0	58.0	55.5	452	505	26,229	28,020
Pennsylvania	14.5	14.5	14.0	14.0	240	220	3,360	3,080
Rhode Island	0.7	0.6	0.7	0.6	210	225	147	135
Washington	165.0	170.0	165.0	170.0	565	560	93,225	95,200
Wisconsin	84.5	86.0	83.5	85.0	370	400	30,895	34,000
All Other Fall States	26.6	24.3	25.7	23.9	340	335	8,738	8,009
U.S. Fall Crop	1,235.1	1,203.0	1,214.0	1,166.1	356	369	432,737	429,451

<sup>&</sup>lt;sup>1/</sup> Data in this table is not derived exclusively from the Potato Objective Yield Survey; this is also the result of other surveys conducted by the New England Agricultural Statistics Service.

SOURCE: Crop Production - Annual, 8:30 am , January 12, 2000, National Agricultural Statistics Service, USDA.

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